

WHAT IS CLAIMED IS:

1. A programmable source of pulse trains on an intermediate frequency, comprising:
 - an input receiving an emitting command in an emitting mode;
 - an instruction device connected to said input for generating emitting instructions;
 - a formatting device transcribing the emitting instructions into a first control signal; and
 - a digital frequency synthesizer device receiving the first control signal and generating a modulated signal on an intermediate frequency, the signal being modulated according to a pulse train having characteristics that are based on the first control signal.
2. The source according to claim 1, wherein the characteristics of a pulse train comprise the presence or absence of frequency hops and the characteristics of these frequency hops.
3. The source according to claim 1, wherein the formatting device comprises an input interface comprising input registers controlled by emitting instructions as a function of the emitting command received by the instruction device.
4. The source according to claim 2, wherein the formatting device comprises an input interface comprising input registers controlled by emitting instructions as a function of the emitting command received by the instruction device.
5. The source according to claim 1, wherein the emitting instructions comprise the emitting mode.
6. The source according to claim 3, wherein the emitting instructions comprise the emitting mode.
7. The source according to claim 4, wherein the emitting instructions comprise the emitting mode.

8. The source according to claim 1, wherein the formatting device comprises means for the management of the IFF interrogations and an output interface generating the first control signal from the values of the input registers.

9. The source according to claim 2, wherein the formatting device comprises means for the management of the IFF interrogations and an output interface generating the first control signal from the values of the input registers.

10. The source according to claim 3, wherein the formatting device comprises means for the management of the IFF interrogations and an output interface generating the first control signal from the values of the input registers.

11. The source according to claim 4, wherein the formatting device comprises means for the management of the IFF interrogations and an output interface generating the first control signal from the values of the input registers.

12. The source according to claim 5, wherein the formatting device comprises means for the management of the IFF interrogations and an output interface generating the first control signal from the values of the input registers.

13. The source according to claim 1, wherein the formatting device comprises means for the management of the IFF test responses and an output interface generating the first control signal from the values of the input registers.

14. The source according to claim 2, wherein the formatting device comprises means for the management of the IFF test responses and an output interface generating the first control signal from the values of the input registers.

15. The source according to claim 3, wherein the formatting device comprises means for the management of the IFF test responses and an output interface generating the first control signal from the values of the input registers.

16. The source according to claim 8, wherein the formatting device comprises means for the management of the IFF test responses and an output interface generating the first control signal from the values of the input registers.

17. The source according to claim 1, wherein the digital frequency synthesis device comprises input registers controlled by the first control signal.

18. The source according to claim 1, wherein the instruction device is connected to the formatting device by only one bus, and the formatting device is connected to the frequency synthesizer device by only one bus.

19. An IFF emitting assembly comprising :
the source according to claim 1, comprising :
 an input connected to a man-machine interface or an external device, generating the emitting command,
 a formatting device generating a second control signal and a third control signal as a function of the emitting instructions,
a translation device receiving the signal modulated by a pulse train on an intermediate frequency and the second and third control signals, and generating a signal modulated by a pulse train on the frequency given by the second control signal having an amplitude given by the third control signal.

20. The IFF emitting assembly according claim 19, wherein frequency synthesizer device generates at least pulse modulated signals or DPSK pulse modulated signals or MSK pulse modulated signals or PPM pulse modulated signals.